

SUMMARY

1. Many well-drained ridges in the Douglas Lake region, Cheboygan County, Michigan, are occupied by virgin beech-maple forests unless this forest has been destroyed by fire, lumbering, or clearing.

2. A typical beech-maple forest is characterized by trees of *Acer saccharum*, *Fagus grandifolia*, *Betula lutea*, *Tilia glabra*, *Acer rubrum*, *Ulmus americana*, and *Ostrya virginiana*. In some of the forests *Tsuga canadensis* may be quite abundant. Shrubs are few and there are about 35 typical ground plants almost always present in beech-maple forests together with some ground plants found in several habitats. Many individuals in this ground cover are seedlings.

3. The reforestation of beech-maple forests in 11 areas was studied during 1926 by the quadrat method.

4. Lumbered areas without fire return to beech-maple by means of coppice development. Burnt areas usually involved fireweed and other stages and take longer. Pastured areas are still more involved and greatly favor the sugar maple (*Acer saccharum*) at the expense of other species. In abandoned cultivated areas, the succession includes weed and meadow stages before the usual stages to the climax beech-maple forest.

KANSAS STATE AGRICULTURAL COLLEGE,
MANHATTAN, KANSAS.

TWO NEW SPECIES OF PORTULACA FROM
MEXICO

PERCY WILSON

✓ *Portulaca Conzattii* P. Wilson, sp. nov.

A rather slender, erect, annual herb, 1.5-3 dm. tall, with slender roots, and tufts of long white hairs in the axils of the leaves; leaves alternate, the blades flat, lanceolate, obovate, or oblanceolate, 1.5-2.7 cm. long, 2.5-4.5 mm. broad, obtuse or acutish at the apex; flowers terminal, in clusters of 2 or 3 surrounded with long white hairs and an involucre of 8 or more leaves; calyx-lobes triangular-orbicular, 5 mm. long, 6.5 mm. wide; corolla yellow, the lobes obovate or elliptic-obovate, 7-8 mm. long, 3-3.5 mm. broad; stamens about 20; style-lobes 4 or

5; capsule subglobose, 4 mm. in diameter, circumscissile at the middle; seeds black, 0.8 mm. wide, rounded-tuberculate.

Type from Cerro San Antonio, Oaxaca, Mexico, July 26, 1906 (*C. Conzatti 1425*, type; 3931).

✓ ***Portulaca mexicana*** P. Wilson, sp. nov.

A fleshy perennial herb, with tuberous roots, and ascending or spreading branches, hairy in tufts in the axils of the leaves; leaves often persistent, the blades terete, linear, 5-9 mm. long, 1.5-2.2 mm. broad, acutish or obtuse at the apex, short-petioled; flowers terminal in clusters of 2-4, surrounded by brownish hairs and an involucre of 9-12 leaves; calyx-lobes orbicular or triangular-orbicular, 3.5-4 mm. long, 3.6-4 mm. broad; corolla-lobes obovate, 4.5-5.3 mm. long, 2.5-3 mm. broad; stamens about 14; style-lobes 3 or 4; capsule ovoid, 4-4.2 mm. high, 3.5 mm. in diameter, circumscissile near the base; seeds 0.6-0.7 mm. in diameter, minutely spiny-tubercled.

Type collected in a lava field, Tizapan, Mexico, July 30, 1901 (*C. G. Pringle 8576*).

✓ NEW YORK BOTANICAL GARDEN.

BOOK REVIEW

COLORADO PLANT LIFE*

Not long ago a resident of Colorado asked me where to find non-technical information about the flowers and trees of Colorado. Fortunately, I had just received a copy of Ramaley's *Colorado Plant Life* and lost no time in recommending it. The book is neither a manual of the Colorado flora, nor a mere list, nor a textbook, but a distinct and apparently a successful attempt to select from the great mass of botanical knowledge a series of facts in which any person may well be interested and which will do much to answer the numerous botanical questions which arise with every intelligent observing person. It has sometimes been said that botany as a field of study in our higher schools lacks the popularity of the humanistic subjects because so much of it deals with phases of plant life with which the student never comes in contact outside the class-room, while his

* Ramaley, Francis. *Colorado Plant Life*. Pages viii + 299. 133 figures, 3 plates in color. 1927. The University of Colorado, Boulder. \$2.00.